

Chp 4 Solids, liquids, + Gases

4.1 States of Matter
solid liquid gas

⁽²⁾ 54, ⁽²⁾ 56, ⁽²⁾ 57, ⁽⁴⁾ 59, ⁽²⁾ 61, ⁽²⁾ 64, ⁽³⁾ 66

69, 71, 74, 75
⁽³⁾ ⁽⁴⁾ ⁽⁴⁾ ⁽⁴⁾

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Energy + work
↓ ↓
P.E. K.E.

Heat -

Temperature -

4.2 Change of state

melting / freezing
vaporization / condensing
sublimation / deposition

Heat of vaporization

Heat of fusion

⁽³⁾ 78, ⁽⁵⁾ 81, ⁽³⁾ 83, ⁽³⁾ 85, ⁽⁶⁾ 87

17

4.3 Pressure

units

Blood pressure (systolic + diastolic)

hypertension

⁽²⁾ 90, ⁽⁴⁾ 92, ⁽⁴⁾ 93, ⁽³⁾ 95, ⁽⁴⁾ 96, ⁽⁴⁾ 97
⁽³⁾ 101

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cont'd

Vapor Pressure
volatile

56

4.4 Gases

4 variables

Gas Laws

Kinetic Molecular Theory

STP + Molar Volume

Boyle's Law $P+V$

Gay-Lussac's Law $P+T$

Charles's Law $P+V+T$

Combined $\frac{PV}{T}$

Dalton's Law of Partial Pressure

Henry's Law

(3) (2) (3) (2) (2) (2)
102, 104, 109, 111, 113, 114

(2) (2) (2) (2) (2) (3)
115, 117, 120, 122, 124, 127

(3) (2) (4) (3) (2)
129, 133, 134, 136, 138

(3) (2) (2) (2) (5)
139, 140, 141, 142, 145